

ASTM Test No.	Title of Test Method	Caltrans Standard Specifications Reference	Materials	Typical frequencies of validation testing
ASTM A307 F1554 A449 A563 F844 A325 A490	Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength	55 1.02A	Non-headed and high strength bolts	See QASI Manual for frequency details
		51-3.02	Elastomeric Bearing Pad	1 test per lot
		51-4.02B(2)	Precast Concrete Girders	Validation test as requested by precast committee
ASTM D412 C639 C603 D792 C661 C793 C679 D1640 C719	Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers-Tension  Standard Test Method for Rheological (Flow) Properties of Elastomeric Sealants	40-1.02I(2)	Silicone Joint Sealant	1 validation test per lot
ASTM D6690	Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements	40-1.02I(3)	Asphalt Rubber Joint Sealant	1 validation test per lot
ASTM D2628 D2835	Standard Specification for Preformed Polychloroprene Elastomeric Joint Seals for Concrete Pavements	40-1.02I(4)	Preformed Compression Joint Seals	1 validation test per lot
ASTM D994	Standard Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type)	40-1.02I(6)	Joint Filler Material	1 validation test per lot
ASTM C1107 C1107M	Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink)	40-1.02J	Nonshrink Hydraulic Cement Grout	1 validation test per lot
ASTM D4587	Standard Practice for Fluorescent UV-Condensation Exposures of Paint and Related Coatings	91-2.02	Paint	1 validation test per batch
ASTM A123 A123M A653 A653M A123 A123M A53 A53M A153 A153M	Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products	75-1.05	Galvanizing	1 validation test per lot

ASTM A416 A416, A882 A882M A722 A722M	Standard Specification for Steel Strand, Uncoated Seven-Wire for Prestressed Concrete.  Standard Specification for Filled Epoxy-Coated Seven-Wire Prestressing Steel Strand	50-1.02B	Prestressing Steel	1 validation test per lot
		56-3.01	Sign Structures Visual and NDT inspections	Minimum 10% of QC
		55-1.01A	Steel Structures Visual and NDT inspections	Minimum 10% of QC
ASTM A709 A709M	Standard Specification for Structural Steel for Bridges	55-1.02A(3)	Structural Steel- FCM members	1 per heat- check sample
ASTM A53 A106 A139 A253 API 5L	Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc- Coated, Welded and Seamless	55-1.02A(1)	Steel pile (structural) Visual and NDT inspections	Minimum 10% of QC
		55-1.02A(1)	Stud connectors (structural) Visual and NDT weld inspections	Minimum 10% of QC
		65-1.01	Concrete pipe (> 60")	D-load witness, once a month cylinders
		85-1.01	Pavement markers	1 per lot
		52-	Couplers, hoops, end anchors	20% of QC
		51-	Bearings- Spherical, PTFE, Isolations etc.	Proof load witness

Sample & test in accordance with Caltrans Quality System Manual (METS "Lab Manual") and/or OSM QASI Manual, and/or the Standard Specifications. Laboratories will require accreditation by AASHTO. Specialty labs will require additional accreditation (i.e.: Bearing Pad testing, A2LA or ISO17025 for examples).

Link for the Quality Systems Manual provided below:

[http://www.dot.ca.gov/hq/esc/Translab/OSM/documents/smdocuments/Quality\\_System\\_Manual\\_REV\\_A\\_April\\_2011.pdf](http://www.dot.ca.gov/hq/esc/Translab/OSM/documents/smdocuments/Quality_System_Manual_REV_A_April_2011.pdf)